

December 17, 2013

**BY ELECTRONIC FILING**

Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 Twelfth Street, S.W.  
Washington, DC 20554

Re: *Issues Related to Allegations of Warehousing and Vertical Foreclosure in the  
Satellite Space Segment, IB Docket No. 13-147*

Dear Ms. Dortch:

Attached you will find a filing made yesterday by DIRECTV, LLC in response to a space station application by SES Americom, Inc. Because this filing discusses an attempt to warehouse valuable orbital/spectrum resources, DIRECTV submits it for the record in this proceeding as well.

Should you have any questions, please do not hesitate to contact me.

Respectfully submitted,

/s/

William M. Wiltshire  
*Counsel for DIRECTV, LLC*

Attachment

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

*In the Matter of*

**SES AMERICOM, INC.**

Application for Authority to Operate the  
SES-3 Satellite at 103° W.L.

IBFS File Nos. SAT-RPL-20121228-00227  
SAT-AMD-20131113-00132

**PETITION TO DENY OR DEFER OF DIRECTV, LLC**

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December 16, 2013

## SUMMARY

SES would like to characterize this proceeding as nothing more than a straightforward request to license SES-3 as a replacement satellite for the aging AMC-1 at the 103° W.L. orbital location. Yet much more lies at stake here. SES designed, built, and launched its new satellite to replace another U.S.-licensed satellite, but then deliberately chose to launch and operate it initially under a license from Luxembourg rather than the United States. SES did so for one simple reason: it wanted to use a token payload on the satellite to gain international priority over a U.S. licensee preparing to launch an innovative new service, in contravention of the U.S. public interest – and knew that the Commission would not authorize such operations.

Only now, having undertaken those missions, does SES seek a U.S. license and the international regulatory advantages that go along with it. By doing so, it asks the Commission to effectively ratify its efforts to block DIRECTV from operating state-of-the-art 17/24 GHz BSS satellites that will be used to provide the first ever commercial “ultra HD” television service in the United States.

The Commission must not reward such conduct. It should deny SES’s application. Failing that, it should at least defer action on this application until such time as SES ameliorates the effects of its prior activities by entering into appropriate spectrum coordination arrangements. Doing otherwise would invite future regulatory gamesmanship and run directly contrary to the Commission’s ultimate criterion – the U.S. public interest.

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In May 2007, SES entered into a satellite construction contract with Orbital Sciences. Under that contract, SES ordered three nearly identical satellites (SES-1, SES-2, and SES-3). The primary mission of these satellites was to replace three aging C-/Ku-band satellites (AMC-1,

AMC-3, and AMC-4). Each, however, also carried a “token” 17/24 GHz BSS payload with very limited capability. All three older AMC satellites were licensed by the Commission. The first two replacement satellites were also licensed by the Commission. Only the third – SES-3 – launched and began operations under the flag of Luxembourg.

SES chose to flag its newest satellite through Luxembourg for a reason. While operating under authority from Luxembourg, SES has maneuvered the SES-3 satellite through the orbital arc, using the token 17/24 GHz BSS payload in an effort to “bring into use” ITU filings by other administrations at the 99° W.L. and 103° W.L. orbital locations. These ITU filings conflict with the licenses the Commission has issued to DIRECTV. By operating under a Luxembourg flag, SES avoided having to get Commission approval for these maneuvers, depriving the Commission of the ability to consider the international consequences of the satellite’s operations.

Having accomplished that goal – and thereby undermined U.S. interests – SES now seeks to be licensed by the Commission so that it can operate SES-3’s C- and Ku-band payloads under the auspices of the U.S. ITU filings at 103° W.L., which convey international priority and protection for the satellite’s more traditional services. In other words, having used a foreign administration to undermine U.S. interests, it now seeks the advantages that come with U.S. licensing. SES is, of course, free to choose whatever licensing administration it thinks will best serve its strategic ends. Yet choices have consequences. The Commission should not allow itself to become a pawn in SES’s regulatory game.

SES’s gamesmanship, moreover, has consequences for the public interest. DIRECTV has nearly completed two state-of-the-art satellites fully capable of making intensive use of its licensed 17/24 GHz BSS spectrum, both of which are scheduled for launch next year. One of those satellites will be located at 103° W.L., where it could be used to supply capacity for

innovative new video services, including the introduction of ultra-HD programming. Yet SES seeks Commission ratification of a strategy under which it has claimed priority in this spectrum using a satellite that, by design, cannot actually offer commercial services using this spectrum. This is the very definition of warehousing.

Granting this application in such circumstances would reward SES's regulatory gamesmanship at the expense of a U.S. licensee that is prepared to initiate the first commercial operations in the 17/24 GHz BSS band next year. Accordingly, the Commission should deny the application as inconsistent with the public interest. At a minimum, the Commission should hold the application in abeyance until such time as a coordination agreement that ameliorates the effects of the maneuvers undertaken prior to seeking a U.S. license has been concluded. Since the satellite SES-3 is to replace is licensed through October 2016, deferring consideration will have no effect on customers while coordination discussions proceed, but would have a highly salutary effect in deterring manipulative conduct in the future.

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**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
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*In the Matter of*

**SES AMERICOM, INC.**

Application for Authority to Operate the  
SES-3 Satellite at 103° W.L.

IBFS File Nos. SAT-RPL-20121228-00227  
SAT-AMD-20131113-00132

**PETITION TO DENY OR DEFER OF DIRECTV, LLC**

DIRECTV, LLC (“DIRECTV”) hereby requests that the Commission deny or defer the above referenced application of SES Americom, Inc. (“SES”) for authority to operate the in-orbit SES-3 satellite in the conventional C- and Ku-band frequencies at the 103° W.L. orbital location.<sup>1</sup> Were the C-/Ku-band payloads the only significance of this satellite, DIRECTV would have no objection to grant of the application. However, this satellite also carries a token 17/24 GHz Broadcasting Satellite Service (“BSS”) payload that SES has used – while the satellite was not licensed by the Commission – to undermine the U.S. public interest in general, and DIRECTV’s interest in particular. Having accomplished those missions, SES now seeks a U.S. license for this spacecraft, with all of the domestic and international regulatory advantages such a license conveys. Rather than reward such conduct, the Commission should deny the application or, at a minimum, hold it in abeyance until such time as spectrum coordination arrangements sufficient to ameliorate the effects of its past activities are concluded.

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<sup>1</sup> See Application of SES Americom, Inc., IBFS File No. SAT-RPL-20110429-00082 (“SES-3 Application”).

## BACKGROUND

SES currently operates the U.S.-licensed AMC-1 satellite in the conventional C- and Ku-bands at the 103° W.L. orbital location.<sup>2</sup> As such, the satellite operates under the auspices of U.S. network filings at the International Telecommunication Union (“ITU”), which conveys international priority over other users of the conventional C- and Ku-band frequencies at 103° W.L.<sup>3</sup> Although AMC-1 was launched in 1996, the Commission recently extended the satellite’s authority to operate until October 2016, based on the remaining useful life of the satellite as determined by SES.<sup>4</sup>

AMC-1 is one of several SES satellites (including AMC-3 and AMC-4) that are approaching the end of their design life and must be replaced. Given that AMC-1 is a U.S.-licensed satellite, and that SES intended from the beginning to use SES-3 as a replacement for AMC-1, one would have expected SES to launch SES-3 as a U.S.-licensed satellite as well, just as it did with two other replacement satellites (SES-1 and SES-2) launched immediately prior to SES-3. Instead, SES launched and began operation of the satellite under authority from Luxembourg.<sup>5</sup>

This was not the result of oversight or mere chance. SES intentionally rejected the U.S. licensing process for a reason. Below we set forth the information necessary to understand SES’s motivation and fully appreciate the significance of its activities. We first discuss the creation of the 17/24 GHz BSS service and licensing in the U.S. and Canada of the 103° W.L. orbital location.

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<sup>2</sup> *See id.* at 3 n.4.

<sup>3</sup> For example, the United States has already notified ITU networks USASAT-24F and USASAT-35H, perfecting international priority in the C- and Ku-bands at the 103° W.L. orbital location.

<sup>4</sup> IBFS File No. SAT-MOD-20110718-00130, Application at 2 (“SES Americom calculates that there is sufficient fuel onboard the AMC-1 spacecraft for the spacecraft to continue providing reliable service during the requested extended license term.”); Granted (Oct. 13, 2011).

<sup>5</sup> *See* SES-3 Application at 4.

We next discuss SES's parallel efforts to replace aging C-/Ku-band satellites in its fleet with new satellites that also included a 17/24 GHz BSS payload. We then provide additional detail with respect to SES's Canadian license at 103° W.L. and trace the activities of SES-3 from launch to its current application for a U.S. license.

### **1. History of the 17/24 GHz BSS at 103° W.L.**

In 1992, the International Telecommunication Union ("ITU") allocated the 17.3-17.8 GHz downlink band – which is currently used for DBS feeder uplinks – to the BSS on a primary basis in Region 2, effective April 1, 2007. In June 1997, DIRECTV filed a petition for rulemaking to conform the U.S. table of allocations to the international BSS allocations, as well as three applications for 17/24 GHz BSS authorizations to complement its DBS operations.<sup>6</sup> The Commission initiated such a rulemaking in 1998, and implemented (in large part) the ITU spectrum allocations in 2000.<sup>7</sup>

After pursuing and developing U.S. licenses in the band for more than 15 years, DIRECTV's efforts have reached their culmination. DIRECTV holds 17/24 GHz BSS authorizations for operations at 99° W.L. and 103° W.L.<sup>8</sup> It has two state-of-the-art satellites under construction, and has procured launch contracts for both. DIRECTV expects to launch these satellites next year, and has been diligently working with consumer electronics manufacturers and

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<sup>6</sup> See *Public Notice*, Report No. 2208 (rel. July 1, 1997); IBFS File Nos. SAT-LOA-19970605-00049, -00050, and -00051.

<sup>7</sup> See *Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, 15 FCC Rcd. 13430, ¶¶ 95-106 (2000). Specifically, effective April 1, 2007, the Commission allocated (1) the 17.3-17.7 GHz band on a primary basis to the BSS for downlink transmissions; (2) the 24.75-25.05 GHz band on a primary basis for BSS feeder uplinks; and (3) the 25.05-25.25 GHz band for co-primary use between BSS feeder uplinks and the 24 GHz Fixed Service.

<sup>8</sup> See IBFS File Nos. SAT-LOA-20060908-00099 and -00100. DIRECTV's authorizations cover only the 400 MHz of downlink spectrum available for domestic operations (*i.e.*, 17.3-17.7 GHz).

programmers to promote the development of the ultra-high definition services it intends to provide using 17/24 GHz BSS capacity. DIRECTV will be the first satellite operator to use this spectrum band to provide a commercial service. And it will be the first provider of any sort to commercialize ultra HD service.

Canada followed a somewhat different path to implementation of the new international allocation. In June 2002 and July 2003, Industry Canada issued calls for interest in 17/24 GHz BSS orbital positions. In July 2006, it released an announcement on the assignment process for Canadian satellite orbital positions, followed by an invitation for interested parties to submit applications to use this frequency band at a number of orbital positions. This initiative was completed in 2008, and followed by two subsequent licensing rounds completed in 2009 and 2011.

The most acquisitive licensee in the Canadian 17/24 GHz BSS licensing process is Ciel Satellite Limited Partnership (“Ciel”). Ciel is a corporate sibling of SES, as it is a 70 percent owned, consolidated subsidiary of SES’s parent company, SES S.A.<sup>9</sup> Ciel currently holds authorizations from Industry Canada for 17/24 GHz BSS operations at five orbital locations (86.5° W.L., 91° W.L., 103° W.L., 111.1° W.L., and 113° W.L.) – more than any other company.<sup>10</sup> Although these licenses as originally issued required the launch of fully capable 17/24 GHz BSS satellites by dates ranging from January 1, 2013 to September 1, 2014, Ciel has obtained multi-year extensions for each one. To date, other than the token payloads on the three satellites discussed below, it has not made any use of these authorizations.

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<sup>9</sup> See, e.g., Press Release, “SES Delivers Strong 2010 Financial Results,” at 4 (Feb. 18, 2011), *available at* <http://www.ses.com/8683985/FY2010-en.pdf> (“In September, following the modification of Canadian foreign ownership rules, SES’ voting interest in Ciel was increased to 70%, entitling a change to the accounting for SES’ interest in Ciel . . . to full consolidation.”).

<sup>10</sup> See Industry Canada, “Authorized and Approved Canadian Satellites”, *available at* <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf05343.html>. Although not reflected on this list, Ciel and Telesat Canada swapped authorizations for the 107.3° W.L. and 111.1° W.L. locations in June 2012.

## 2. SES's Replacement Program

In May 2007, SES entered into a master satellite construction contract with Orbital Sciences. To date, SES has ordered, taken delivery of, and launched three nearly identical spacecraft under that contract: SES-1, SES-2, and SES-3.<sup>11</sup> SES launched these satellites consecutively over the course of 17 months. In each case, the satellite's primary mission was to replace an aging U.S.-licensed C-/Ku-band satellite. Each satellite also, however, included a token 17/24 GHz BSS payload with a simple low gain wide beam transmit/receive horn antenna, a single 500 MHz wideband transponder supported by a single TWTA, and a maximum transmit EIRP capability of 33 dBW, which the link budgets included with the applications for each of these satellites demonstrate are capable of supporting a single 5.5 MHz carrier, at best. Yet their common origins and missions belie their disparate regulatory fates. We discuss each in turn below.

- **SES-1.** SES-1 has always been a U.S.-licensed satellite whose primary mission was to act as a replacement for the C-/Ku-band payloads on the U.S.-licensed AMC-4 satellite.<sup>12</sup> It was launched to the 101° W.L. orbital location in April 2010. In its application, SES disclosed the fact that the satellite would have a 17/24 GHz BSS payload, but SES announced that it did not intend to operate that payload and so did not seek operational authority for it.<sup>13</sup>

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<sup>11</sup> See, e.g., Press Release, "SES Americom Orders Additional Spacecraft From Orbital Sciences Corporation" (Apr. 8, 2008), available at <http://www.ses.com/4233325/news/2008/4462381> (announcing the order of a third spacecraft under the multi-satellite contract announced in May 2007); Fact Sheet, "SES-1, SES-2, and SES-3", available at [http://www.orbital.com/NewsInfo/Publications/SES\\_Fact.pdf](http://www.orbital.com/NewsInfo/Publications/SES_Fact.pdf) (discussing construction of three virtually identical hybrid C-/Ku-band satellites for SES that "also incorporate a redundant Ka-band payload").

<sup>12</sup> See IBFS File No. SAT-RPL-20100120-00014.

<sup>13</sup> See IBFS File No. SAT-AMD-20100309-00040. This amendment also confirmed the limited capabilities of the payload, showing a link budget that could support no more than a single 5.5 MHz carrier at 34 dBW EIRP. *Id.*, Technical Appendix at 5.

➤ **SES-2.** SES-2 also has always been a U.S.-licensed satellite, whose primary mission was to act as a replacement for the C-/Ku-band payloads on the U.S.-licensed AMC-3 satellite.<sup>14</sup> It was launched to the 87° W.L. orbital location in September 2011. In its application, SES disclosed that the satellite would have a 17/24 GHz BSS payload, but did not seek authority to operate it.<sup>15</sup> In addition, SES assured the Commission that “[b]ecause [SES] is not seeking an operating license in the 17/24 GHz BSS band, the authorization for SES-2 will have no preclusive effect on deployment of 17/24 GHz BSS networks by other prospective operators.”<sup>16</sup> SES reiterated this assurance in support of a waiver request, asserting that “[b]ecause [SES] is not seeking an operating license for the SES-2 17/24 GHz BSS payload, grant of a waiver here will not block deployment of compliant 17/24 GHz BSS spacecraft.”<sup>17</sup> SES gave no indication that it would operate the 17/24 GHz BSS payload at all, or that Ciel held a Canadian license for such operations.

Notwithstanding these assurances, Ciel used the payload on the U.S.-licensed SES-2 satellite at 87° W.L. to bring into use the Canadian 17/24 GHz BSS filing with the ITU (CAN-BSS9) at 86.5° W.L.<sup>18</sup> By doing so, Ciel perfected international priority for that filing and thereby secured for itself the ability to block deployment of other 17/24 GHz

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<sup>14</sup> See IBFS File No. SAT-RPL-20110429-00082. Here again, SES confirmed the limited capabilities of the payload, showing a link budget that could support no more than a single 5.5 MHz carrier at 31.3 dBW EIRP. *Id.*, Technical Appendix at 16.

<sup>15</sup> See *id.*, Narrative at 3 n.6, 5.

<sup>16</sup> *Id.* at 6.

<sup>17</sup> *Id.* at 7.

<sup>18</sup> The authorization at 86.5° W.L. was originally awarded to Telesat Canada, but was transferred to Ciel in November 2011. See Letter from Louis LePage to Scott Gibson, File No. 46215-1 (255875 RH) (Nov. 17, 2011), available at <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10710.html>. Ciel subsequently received authority to use the payload on SES-2 on an “interim” basis until November 1, 2018, by which time its “new” licensed spacecraft must be launched. See Letter from Suzanne Lambert to Scott Gibson, File No. 46215-1 (321292 CP) (Apr. 5, 2013), available at <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10712.html>.

BSS systems in and around the 86.5° W.L. location – directly contrary to the representations made to the Commission in the SES application. Moreover, under ITU rules, when a satellite licensed by one administration is used to bring into use the network filing of another administration, the licensing administration must be given notice and an opportunity to object to such use of the satellite.<sup>19</sup> There is no evidence that Ciel or anyone else has ever given such notice to the Commission.

- **SES-3.** SES-3 was the third satellite ordered from Orbital Sciences under the master contract.<sup>20</sup> The evidence clearly shows that SES has consistently intended to use SES-3 as a replacement for the C-/Ku-band operations of AMC-1 at 103° W.L. For example, at SES’s Investor Day 2011, its President and Chief Executive Officer identified SES-3 as one of three satellites to be launched by the end of 2014 “providing pure replacement capacity.”<sup>21</sup> When the satellite was delivered to the launch site, SES issued a press release stating that “SES-3 is a hybrid C- and Ku-band satellite which will replace AMC-1 at 103 degrees West” and characterizing it as “an integral part of SES’ satellite replacement program over North America.”<sup>22</sup> SES confirmed the satellite’s mission after launch, again

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<sup>19</sup> See WRC-12 decisions included in the Minutes of Plenary meeting relating to space services procedures in ITU-R circular letter CR/333.

<sup>20</sup> Like the two satellites that preceded it, SES-3 also had a token 17/24 GHz BSS payload capable of transmitting only a single 5.5 MHz carrier at 31.6 dBW EIRP. See SES-3 Application, Technical Appendix at 14.

<sup>21</sup> Investor Day 2011, Strategic Overview, at 10 (May 24, 2011), *available at* [http://www.ses.com/3934391/110520\\_Investor\\_Day\\_CEO\\_FINAL\\_Download.pdf](http://www.ses.com/3934391/110520_Investor_Day_CEO_FINAL_Download.pdf). See also Press Release, “Satellite Capacity Growth like Never Before” (Feb. 2, 2011), *available at* [http://www.ses.com/3828205/Expanding\\_fleet](http://www.ses.com/3828205/Expanding_fleet) (“SES-3 is slated to launch in April, and is expected to replace AMC-1 in the prime 103° West orbital slot”); Press Release, “International Launch Services and SES Announce the ILS Proton Launch of SES-3 in 2011” (Feb. 11, 2010), *available at* <http://www.ses.com/4233325/news/2010/4471592> (“SES-3 is intended to replace existing spacecraft over the Americas”).

<sup>22</sup> Press Release, “SES-3 Satellite Arrives at Baikonour Launch Base” (June 9, 2011), *available at* <http://www.ses.com/4233325/news/2011/4494492>.

stating that “[t]he spacecraft will replace SES’ existing AMC-1 satellite at the orbital position of 103 degrees West.”<sup>23</sup> Although its primary mission was to act as a replacement for the U.S.-licensed AMC-1 satellite, SES-3 was not launched under a U.S. license.

Rather, it was launched under a Luxembourg authorization in July 2011.

**3. SES Used SES-3 to Bring Into Use 17/24 GHz BSS Filings by Other Administrations That Conflict with Licenses Issued by the Commission**

Ciel received its original license for 17/24 GHz BSS operations at 103° W.L. in June 2008. It included a requirement that Ciel launch and operate a new satellite at that location by January 1, 2013.<sup>24</sup> Later that year, Ciel received an amendment to that license such that it was required to launch and operate only an “interim satellite” by January 1, 2013 and a “new satellite” by January 1, 2015.<sup>25</sup> In September 2012, Ciel sought and received a second modification that pushed the date by which a “new satellite” had to be launched out to December 1, 2018 – *i.e.*, more than ten years after the original license was issued.<sup>26</sup>

In the meantime, SES maneuvered the SES-3 satellite through the orbital arc, using its token 17/24 GHz BSS payload to bring into use two ITU filings made by foreign administrations that conflict with the licenses the Commission issued to DIRECTV.

- **Luxembourg at 99° W.L.** After launch and in-orbit testing of SES-3, SES relocated the satellite to 99° W.L., where it allegedly “operated on the 17/24 GHz BSS frequencies and

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<sup>23</sup> Press Release, “SES-3 Launch Success on ILS Proton” (July 16, 2011), *available at* <http://www.ses.com/4233325/news/2011/4494973>.

<sup>24</sup> See Letter from J.K. Lindsey to David Lewis, File No. 46215-1 (156297 RH) (June 27, 2008), *available at* <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09020.html>.

<sup>25</sup> Satellite Limited Partnership Ciel – Conditions to Obtain Authority to Operate a 17 GHz BSS Space Station at the 103° W Orbital Position, *available at* <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09773.html>.

<sup>26</sup> See Letter from Suzanne Lambert to Bernie Haughian, File No. 46215-1 (303498 AT) (Sep. 21, 2012), *available at* <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09772.html>.

C-band Telemetry, Tracking and Command ('TT&C') frequencies authorized by the administration of Luxembourg for slightly less than 90 days."<sup>27</sup> The satellite's operations were apparently the basis upon which a claim was made with the ITU that the Luxembourg 17/24 GHz BSS network filing at 99° W.L. (LUX-G4-59A) had been brought into use.<sup>28</sup> The satellite was then moved to 108.2° E.L. to provide Ku-band capacity to the Middle East.

- **Canada at 103° W.L.** After operating briefly at 108.2° E.L., SES moved its satellite yet again to its current position at 103.1° W.L. Here again, the satellite's operations were the basis upon which Ciel claimed to have brought into use the Canadian 17/24 GHz BSS network (CAN-BSS19) at 103° W.L.

SES's claim at 103° W. L. is particularly egregious. As shown in Appendix A hereto, the downlink beam of the SES-3 17/24 GHz BSS payload has virtually no directivity of the sort one would expect from a satellite intended to provide commercial service. By comparison, the C- and Ku-band downlink contours are shaped to target the United States. Similarly, DIRECTV's 17/24 GHz BSS satellite at 103° W.L. not only targets the United States, but also evidences the advanced design necessary to comply with the Commission's regional power flux-density limits in this band.<sup>29</sup> DIRECTV has engaged Ciel in an effort to coordinate 17//24 GHz BSS operations at 103° W.L. It is clear from initial discussions between the parties that Ciel intends to use SES-3's limited capabilities to claim international rights to the entire 500 MHz of uplink and downlink

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<sup>27</sup> SES-3 Application at 4.

<sup>28</sup> Luxembourg filed a Part I-S Notification request for the LUX-G4-59A network in February 2012 citing a date of bringing into use of the network of September 20, 2011. This date corresponds fairly well to the date that NORAD data places the SES-3 satellite at 99° W.L. Luxembourg filed ITU Resolution 49 due diligence data for this network at the same time, and this due diligence data is consistent with that for SES-3.

<sup>29</sup> See 47 C.F.R. § 25.208(w).

spectrum in the 17/24 GHz BSS allocation at 103° W.L. Thus, while able to use only 1.1% of the available bandwidth at a power level too low to support a commercial BSS service, Ciel nonetheless would block others – including DIRECTV – from operating a fully capable satellite that could otherwise use these valuable orbital and spectrum resources to provide innovative BSS service to millions of U.S. consumers.

## DISCUSSION

### **1. The Application Should Be Denied Because Grant Would Not Serve the Public Interest**

Section 309 of the Communications Act mandates that in each application for a station license, the Commission must determine “whether the public interest, convenience, and necessity will be served by the granting of such application.”<sup>30</sup> This requirement is the most fundamental criterion for Commission action. It is specifically implemented for space station applications in Section 25.156 of the Commission’s rules, which provides that a station authorization will be granted only “if, upon examination of the application, any pleadings or objections filed, and upon consideration of such other matters as it may officially notice, the commission finds that the applicant is legally, technically, and otherwise qualified . . . and that grant of the application will serve the public interest, convenience and necessity.”<sup>31</sup> Accordingly, the U.S. public interest is the ultimate touchstone in determining the appropriate disposition of SES’s application.

In the circumstances presented here, the Commission cannot make the requisite finding that grant of this application would serve the public interest. The evidence clearly demonstrates that SES-3 was always intended to be a replacement for the U.S.-licensed AMC-1 satellite. Yet SES did not seek launch and operating authority from the Commission for this replacement satellite.

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<sup>30</sup> 47 U.S.C. § 309(a).

<sup>31</sup> 47 C.F.R. § 25.156(a).

Rather, SES intentionally chose to deny the Commission authority over SES-3 so that it could use the spacecraft's token 17/24 GHz BSS payload to bring into use foreign ITU filings that could prevent the operation of state-of-the-art U.S.-licensed systems. Having thus undermined U.S. interests, SES now asks the Commission to take responsibility for this satellite and extend to it the protection of operating under the United States' notified C-/Ku-band ITU network filings at the 103° W.L. location. SES, in other words, asks the Commission to ratify and endorse its bringing-into-use strategy.

The Commission cannot allow SES to abuse its process in this manner. SES made a choice and must now live with the consequences. It should not be allowed to use a satellite to flout U.S. interests and then later seek for that same satellite the advantages of a U.S. license and the ITU priority associated with it. As the Commission has recognized, "damage to the credibility of the Commission's processes caused by the widespread perception that these processes are being abused is, in itself, injurious to the efficacy of these processes, to those who may wish to participate in them in order to accomplish legitimate objectives, and to public confidence in them."<sup>32</sup> Were the Commission to essentially ratify SES's activities and reward its strategic behavior, it would undoubtedly encourage others to engage in similarly abusive practices. It must instead impose a cost sufficient to deter such regulatory gamesmanship in the future.<sup>33</sup>

Granting SES's application would also implicitly endorse its warehousing of valuable spectrum/orbital resources. Warehousing among satellite operators is sufficiently worrisome that

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<sup>32</sup> *Formulation of Policies and Rules Relating to Broadcast Renewal Applicants, Competing Applicants, and Other Participants to the Comparative Renewal Process and to the Prevention of Abuses of the Renewal Process*, 5 FCC Rcd. 3902-03, ¶ 9 (1990).

<sup>33</sup> *See, e.g., Barry P. Lunderville et al.*, 23 FCC Rcd. 10390, ¶ 25 (WTB 2008) (parties that engage in regulatory gamesmanship "should be held fully accountable for their actions" and their argument to the contrary "underlines the importance of assessing [penalties] that are substantial enough to deter such behavior").

the Commission initiated a Notice of Inquiry earlier this year specifically on that subject.<sup>34</sup> As the Commission has explained, “warehousing could hinder the availability of services to the public at the earliest possible date by blocking entry by other entities willing and able to proceed immediately with the construction and launch of their satellite systems.”<sup>35</sup> Such foreclosure is exactly what SES is attempting here. DIRECTV is ready to initiate a new age of commercial development for the 17/24 GHz BSS band. Its two state-of-the-art satellites operate using all of its licensed spectrum at each orbital location (compared to SES’s single 5.5 MHz carrier), at power levels almost 300 times greater than that of SES’s token payload. Just as it did with HD programming on its Ka-band satellites, DIRECTV intends to use this new capacity to launch a new service: a package of ultra-HD programming that no other distributor currently offers. Having intentionally bypassed Commission licensing, SES used SES-3 not to provide a competing commercial service, but rather to block DIRECTV’s introduction of an innovative offering. These facts belie SES’s assertion in response to the *Warehousing NOI* that “the facts do not bear out [the] suggestion that the actions of existing satellite operators deny access to orbital slots that competitors could use more efficiently.”<sup>36</sup>

DIRECTV is unaware of any previous case in which the Commission has been asked to take responsibility for a satellite licensed by another administration that had been used to subvert the U.S. public interest. Although this case therefore is one of first impression, the Commission has denied other space station applications that would have enabled operators using satellites with limited capabilities to block other operators with state-of-the-art technology. For example, it

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<sup>34</sup> See *Issues Related to Allegations of Warehousing and Vertical Foreclosure in the Satellite Space Segment*, 28 FCC Rcd. 8571 (2013) (“*Warehousing NOI*”).

<sup>35</sup> *Amendment of the Commission’s Space Station Licensing Rules and Policies*, 18 FCC Rcd. 10760, ¶ 173 (2003).

<sup>36</sup> See Comments of SES S.A., IB Docket No. 13-147, at 12 (filed Aug. 19, 2013).

denied a license to PanAmSat that would have, “in essence, allow[ed] an obsolete satellite launched in 1984 and operating a decade beyond its regular license term to block entry by a state-of-the-art satellite.”<sup>37</sup> Even if PanAmSat planned to move a new satellite into that location in the future, it would not change the Commission’s determination that allowing the spectrum to be warehoused in this manner would not serve the public interest.<sup>38</sup> For similar reasons, the Commission has not allowed the use of older satellites with minimal capabilities as placeholders for new satellites promised at the time of authorization.<sup>39</sup>

The license SES seeks in this proceeding is very valuable. It confers not only the right to serve the lucrative U.S. market, but also the right to operate under the international protection of the U.S.’s ITU filings at 103° W.L. Had SES sought this license for SES-3 prior to launch – as it did for the nearly identical replacement satellites, SES-1 and SES-2 – the Commission would have been able to determine where the satellite would be able to operate and what international consequences those operations would have. By choosing instead to launch and operate under authority of Luxembourg, SES denied the Commission the opportunity to make those public interest determinations. If it wishes to avoid endorsing this behavior, the Commission should deny SES the opportunity to enjoy the benefits of the administration it tried to circumvent.

## **2. At a Minimum, the Commission Should Hold the Application in Abeyance Pending Completion of an Appropriate Coordination Agreement**

Notwithstanding the limitations of the token 17/24 GHz BSS payload on SES-3, the Canadian network filing that it brought into use covers all 500 MHz of spectrum in the band over all of North, Central, and South America. On its face, that filing would essentially preclude the use

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<sup>37</sup> *PanAmSat Licensee Corp.*, 19 FCC Rcd. 2012, ¶ 9 (Int’l Bur. 2004).

<sup>38</sup> *Id.*, ¶ 10.

<sup>39</sup> *See, e.g., EchoStar Corp.*, 26 FCC Rcd. 10442, ¶ 8 (Int’l Bur. 2011); *Star One, S.A.*, 25 FCC Rcd. 14338, ¶ 8 (Int’l Bur. 2010).

of the 103° W.L. orbital location for 17/24 GHz BSS operations by a satellite licensed by any other administration, including the United States. Thus, at present, the operations of the token payload on SES-3 at 103° W.L. can be used to block DIRECTV's use of this slot by its state-of-the-art 17/24 GHz BSS satellite scheduled to launch next year.

However, it may be possible to coordinate SES's and DIRECTV's *actual* operations at this location (as opposed to the operations claimed in the ITU filing for which SES seeks international protection). The two parties have engaged in initial coordination discussions. Unfortunately, at this time, it is too early to tell whether those discussions will lead to a satisfactory arrangement for sharing the slot. DIRECTV remains hopeful that such an arrangement can be reached. Until it is, however, the Commission cannot merely assume that the parties will arrive at a solution that can sufficiently ameliorate SES's prior use of the satellite such that granting this application would serve the U.S. public interest.

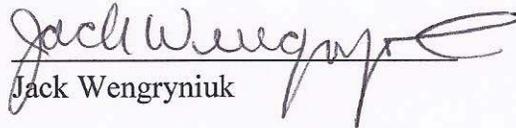
Accordingly, if the Commission does not deny the application outright, it should hold it in abeyance until the coordination process has reached its conclusion. At that point, the Commission will be in a position to make its public interest determination informed by any mitigating circumstances arising from that process.



## AFFIDAVIT OF JACK WENGRYNIUK

I, Jack Wengryniuk, hereby declare under penalty of perjury as follows:

1. I am employed by DIRECTV, LLC ("DIRECTV") as Senior Director of Spectrum Management and Regulatory Affairs. I have been an employee of DIRECTV since 2004.
2. I have personal knowledge of the International Telecommunication Union Radio Regulations, the operation and status of DIRECTV's satellites in-orbit and under construction, and the discussions between DIRECTV and Ciel Satellite Limited Partnership related to 17/24 GHz BSS operations at the 103° W.L. orbital location.
3. I have reviewed the preceding Petition and the factual statements therein are complete and accurate to the best of my knowledge, information, and belief.

  
Jack Wengryniuk

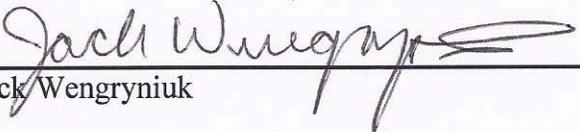
Executed on December 16, 2013

## ENGINEERING CERTIFICATION

The undersigned hereby certifies to the Federal Communications Commission as follows:

- (i) I am the technically qualified person responsible for the engineering information contained in the foregoing Petition,
- (ii) I am familiar with Part 25 of the Commission's Rules, and
- (iii) I have either prepared or reviewed the engineering information contained in the foregoing Petition, and it is complete and accurate to the best of my knowledge and belief.

Signed:

  
\_\_\_\_\_  
Jack Wengryniuk

December 16, 2013  
\_\_\_\_\_

Date

## **APPENDIX A**

### **DOWNLINK TRANSMIT BEAM COUNTOURS FROM THE SES-3 AND DIRECTV RB-2 APPLICATIONS**

Figure A1.4 C-band, Transmit beam, H-pol (CTH)

EIRP max: 42.1

Antenna gain max: 31.3 dBi

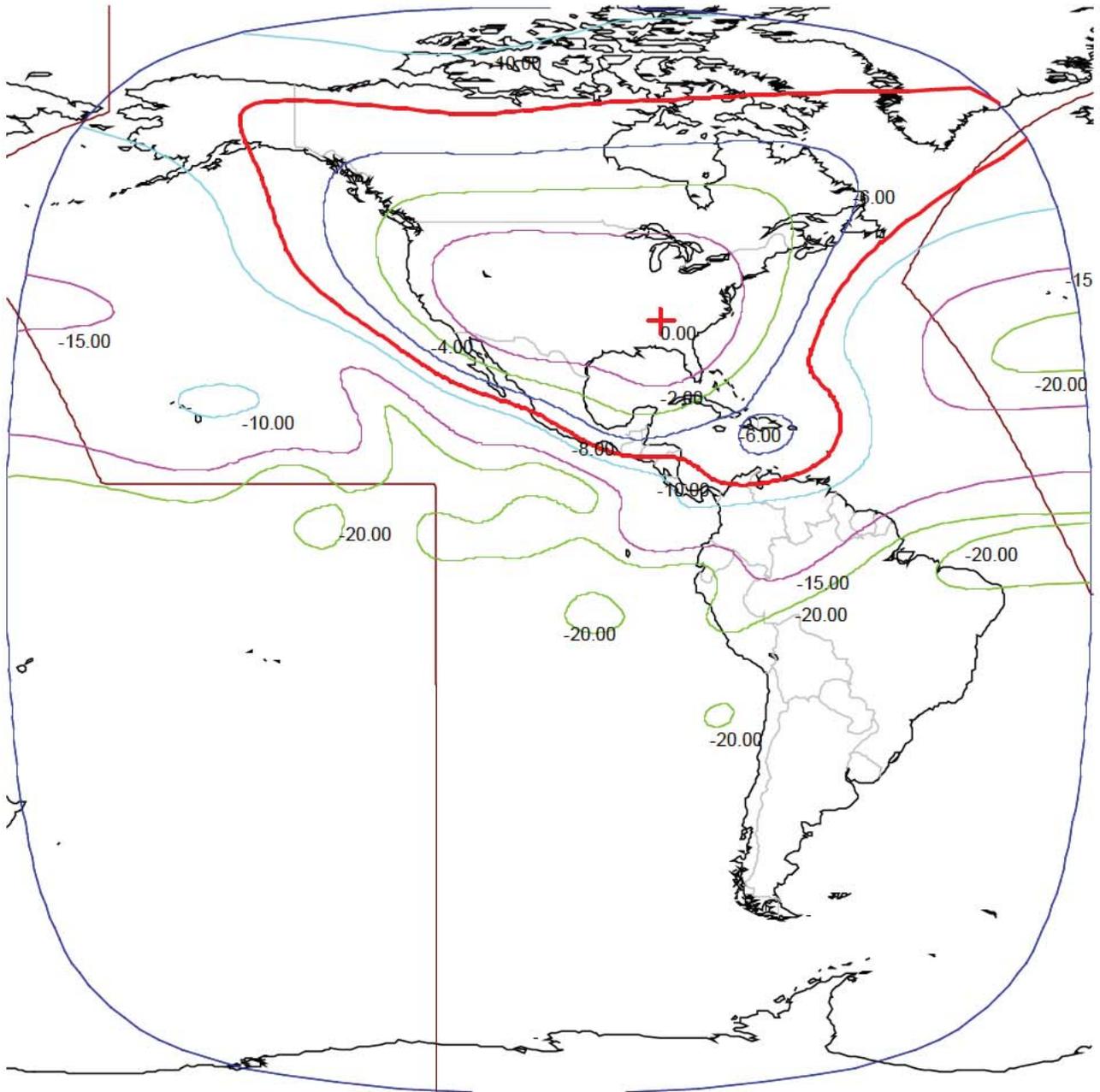


Figure A1.6 Ku-band, Transmit beam, H-pol (KTH)

EIRP max: 53.3 dBW

Antenna gain max: 36.1 dBi

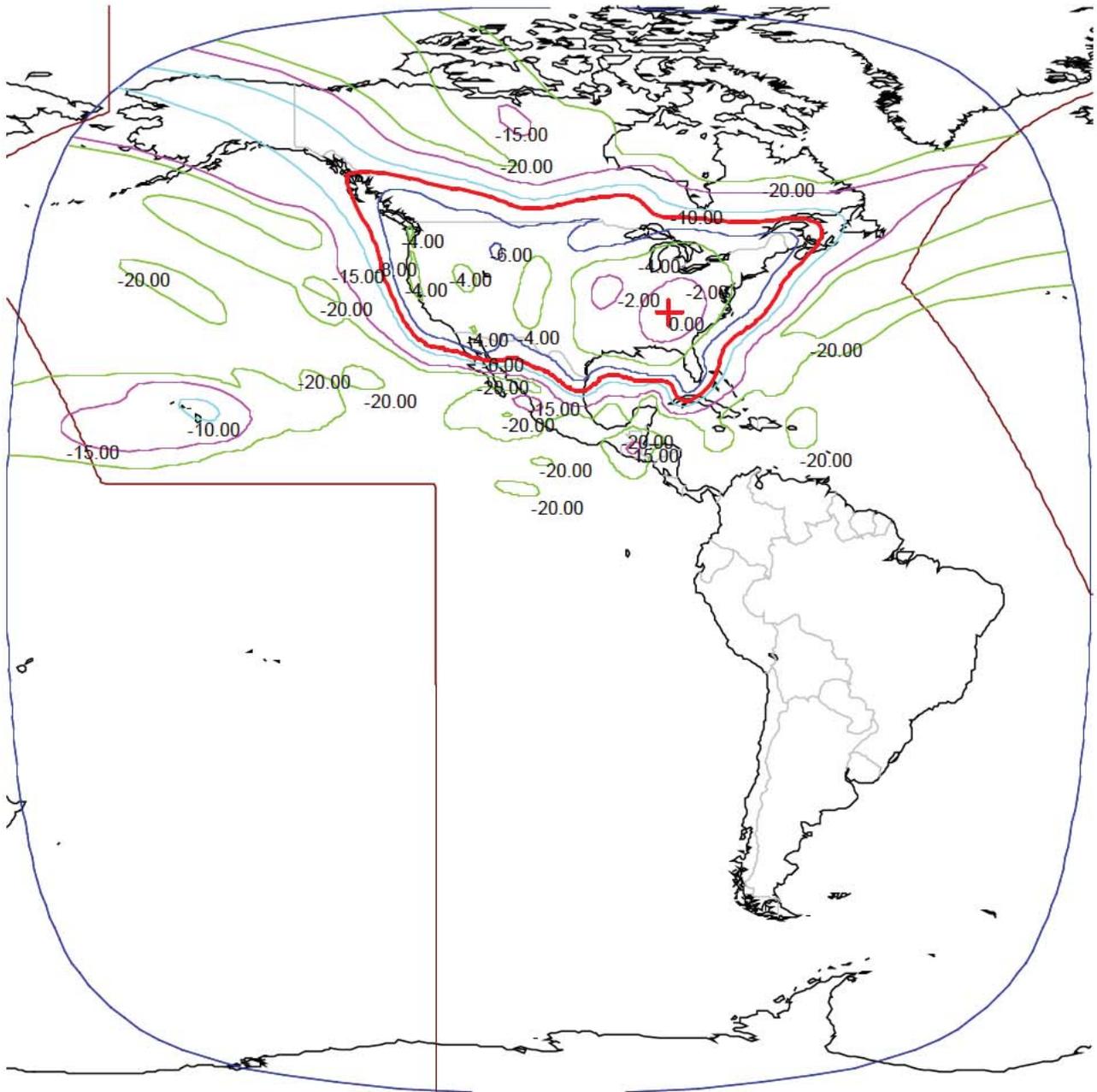
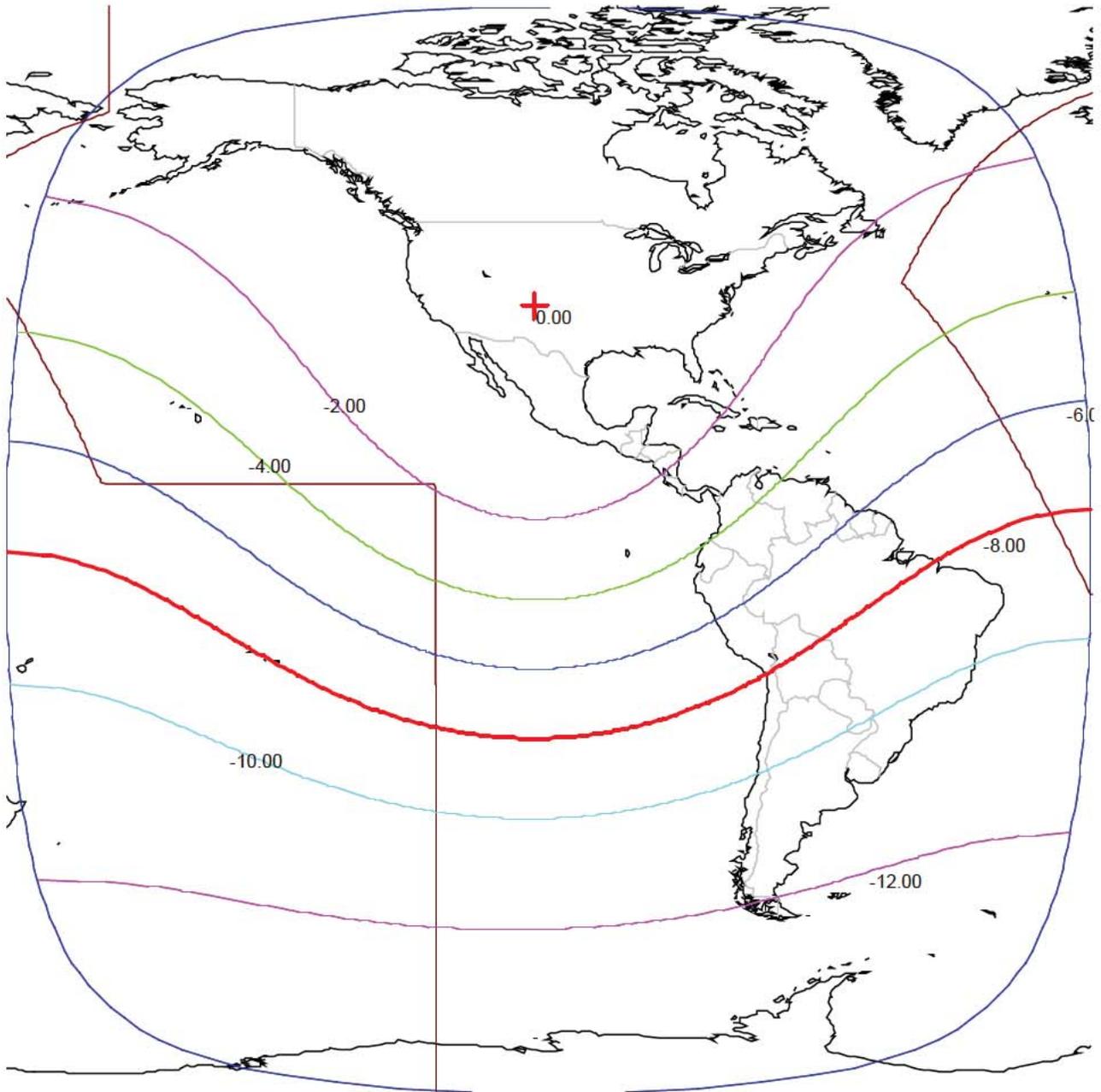


Figure A1.10 17/24 GHz band, Transmit beam, LHCP/RHCP (KATL/KATR)

EIRP max: 33.6 dB/K

Antenna gain max: 23.3 dBi



DIRECTV RB-2 17/24 GHz BSS Transmit Beam Contours

EIRP Max: 58 dBW

Antenna Gain Max: 36.5 dB

